

WHAT IS CLAIMED IS:

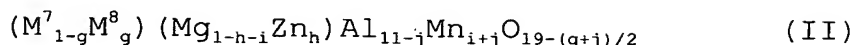
1. A phosphor for vacuum ultraviolet ray-excited light-emitting elements which comprises a compound represented by the following formula (I):



(wherein  $M^1$  is at least one element selected from the group consisting of La, Y and Gd,  $M^2$  is at least one element selected from the group consisting of Ce and Tb,  $M^3$  is at least one element selected from the group consisting of Ca, Sr and Ba,  $M^4$  is at least one element selected from the group consisting of Mg and Zn,  $M^5$  is at least one element selected from the group consisting of Al and Ga, and  $M^6$  is at least one element selected from the group consisting of Mn and Eu, and a, b, c, d, e and f are numbers satisfying the conditions of  $0 \leq a < 1$ ,  $0 \leq b \leq 0.6$ ,  $0 \leq c \leq 0.5$ ,  $0 \leq d \leq 0.5$ ,  $0 \leq e < 1$ ,  $0 \leq f < 1$ ,  $a+b+c+d < 1$  and  $0 < c+d+e+f$ ), respectively.

2. A phosphor according to claim 1, wherein c, d, e and f satisfy the condition  $0.001 \leq c+d+e+f \leq 1$ .
3. A phosphor according to claim 1 or 2, wherein  $M^4$  consists of Mg and Zn.
4. A phosphor according to any one of claims 1-3, wherein  $M^1$  consists of La and Y.
5. A phosphor according to any one of claims 1-4, wherein  $M^5$  is Al.
6. A phosphor according to claim 1 which

comprises a compound represented by the following formula (II):



(wherein  $M^7$  is at least one element selected from the group consisting of La, Y and Gd and  $M^8$  is at least one element selected from the group consisting of Ca, Sr and Ba, and g, h, i and j are numbers satisfying the conditions of  $0 < g \leq 0.6$ ,  $0 \leq h \leq 1$ ,  $0 \leq i \leq 0.5$ ,  $0 \leq j \leq 0.5$ ,  $h+i \leq 1$ , and  $0 < i+j \leq 0.5$ , respectively).

7. A phosphor according to claim 1 which comprises a compound represented by the following formula (III):



(wherein  $M^9$  is at least one element selected from the group consisting of La, Y and Gd and  $M^{10}$  is at least one element selected from the group consisting of Ca, Sr and Ba, and k, m and n are numbers satisfying the conditions of  $0 < k \leq 0.6$ ,  $0 < m \leq 0.4$ ,  $0 \leq n \leq 1$ , and  $k+m < 1$ , respectively).

8. A vacuum ultraviolet ray-excited light-emitting element comprising the phosphor described in any one of claims 1-7.